

Preserving Heritage Resources Through Responsible Use of Southern Nevada's Lands

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Executive Summary

Southern Nevada's cultural resources (heritage resources) include archeological remains, sacred sites, historic sites, and cultural landscapes of significance to Native Americans and many other cultural groups. Locating, maintaining, and protecting these special places are part of the mandate of Nevada's Federal and state agencies. This summary addresses Sub-goal 2.2 in the SNAP Science Research Strategy, which is "To preserve these resources through responsible use of southern Nevada's lands" (see table 1.1). Cultural resources at risk, risk factors, and needed measures to protect them are discussed, focusing on non-destructive identification, preservation, and protection measures.

Cultural Resources at Risk

Nevada is one of the fastest growing states in the country. In southern Nevada, the population of Clark County (1,951,269) grew by 42 percent from 2000 to 2010. Immigration from other states has contributed strongly to this growth, with newcomers often having little knowledge of the role and importance of the state's history. These population growth trends have considerable influence on how the state preserves its past. Urban growth and development can lead to resource destruction as homes and businesses are built on previously undeveloped lands. Growing pressure on resources from increased recreation and the use of all-terrain vehicles (ATVs) has resulted in rising vandalism and illegal looting (collecting artifacts and/or excavating on an archeological site without a permit) on previously remote and inaccessible sites. Agency reports identify the following threats to heritage sites:

- Increasing visitation,
- Increasing use of public lands for permitted projects,
- Insufficient staffing and funding for cultural resource programs and law enforcement,
- Looting and vandalism, and
- Urban sprawl and development.

Cultural Resource Protection Measures and Organizations

Federal agencies in southern Nevada use and recommend a number of measures to assist in protecting heritage resources: public education and outreach programs, cultural resource site monitoring, and law enforcement for cultural resources.

Public Education and Outreach

Public education and outreach efforts range from preparing sites and structures to receive visitors with trails, signage, and other protection measures such as fencing, to active public involvement programs. Rapidly increasing recreation access requires public education concerning the importance and fragility of archeological and historic sites. Some of the most successful programs involve public participation, but they reach a more limited audience. Brochures and information kiosks also can be effective teaching tools and reach a wider audience. They are especially effective when they are attractive, current, and appropriately placed near the resource in question.

Several agencies have long-running, successful public involvement programs. An example of these is Adventures in the Past, which includes Project Archaeology, a national Bureau of Land Management (BLM) education program designed for teachers of upper elementary and mid-school students. The program trains teachers and provides curriculum materials for teaching students to value and care for their archeological and historic heritage. A Nevada-specific program, *Preserve Nevada*, is a non-profit organization dedicated to preservation of the state's cultural, historic, and archeological heritage. *Preserve Nevada* works with the Public History program at the University of Nevada, Las Vegas, and provides the opportunity for graduate students to gain experience and training by working on the organization's projects.

Other examples of creative outreach and education programs come from Lake Mead National Recreation Area, which has an active education and interpretive program featuring educational programs, field trips, and volunteer experiences. Education programs include not only cultural resource activities but also activities from other science programs for students and teachers. There is a Hispanic outreach program and a Hispanic community partnership program, which includes other Federal agencies that are part of SNAP, such as the BLM, U.S. Forest Service (USFS), Fish and Wildlife Service (FWS), and National Park Service (NPS). Specific examples of historic and cultural programs for students include "Hiking Through History," which focuses on the Hoover Dam and the U.S. Government Railroad, and "Puzzle Pieces of the Past," which focuses on archeological sites and artifacts.

Cultural Resource Site Monitoring

Monitoring the condition of heritage resources is an important part of agency responsibilities to their lands. Unfortunately, there are rarely sufficient law enforcement officers and staff to undertake comprehensive site monitoring on a realistic scale and time frame. Thus, in 2004, the Southern Nevada Agency Partnership (SNAP) Interagency Cultural Site Stewardship Team created the SNAP Cultural Site Stewardship Program (CSSP). The program is managed under a cooperative agreement with the University of Nevada-Las Vegas, Public Lands Institute (UNLV-PLI). The UNLV-PLI Program Manager provides a variety of services including recruitment of volunteer site stewards, standardized training, reporting of monitoring results to the appropriate Federal agency, and public outreach. The program is composed of volunteers who serve as site stewards to monitor at-risk sites for natural or man-made damage, which is reported to the responsible land manager. The volunteer site stewards monitor their assigned sites at least four times per year. To date, over 540 volunteer site stewards have been trained. Stewards have reported over 645 significant impacts that have resulted in criminal investigations, and have informed management actions including closing of unapproved roads, development of a Road Designation Plan, and removal of graffiti from rock art sites. The program has been very successful and has received several awards.

Law Enforcement for Cultural Resources

Federal agency law enforcement plays an important role in protecting archeological and historic remains from looting and vandalism. However, Federal heritage resource professionals believe that there are far too few agency law enforcement officers. Despite this shortage, there have been various successful prosecutions in recent years that have increased awareness of the problem of looting on archeological sites. BLM enforcement personnel have had some highly publicized and successful enforcement actions taken against organized thieves stealing archeological artifacts from the public lands. The USFS has successfully prosecuted an ARPA (Archaeological Resources Protection Act) case resulting in replacement of a petroglyph to its original location. The NPS had a successful prosecution of a man who was sentenced to time in Federal prison and ordered to pay restitution for defacing petroglyphs with paintballs in the Grapevine Canyon area of Lake Mead National Recreation Area. "This sentence comes as a result of the hard work of park rangers, special agents of the National Park Service Investigative Services Bureau, and the U.S. Attorney's Office. We are pleased with the result," said Bill Dickinson, superintendent of Lake Mead National Recreation Area. Despite such successes, there are still too few enforcement officers to protect the cultural resources on the extensive public lands of the state. "For every criminal caught in an ARPA violation, it is believed that many more violations go un-discovered, much less un-prosecuted."

Non-Destructive Techniques for Identification of Archeological and Historic Remains

Because information on both surface and subsurface cultural resources is needed for management decisions, non-destructive techniques to uncover subsurface features can play an important role as part of the heritage resource toolkit. Geophysical surveying systems, such as ground penetrating radar, magnetometry, and soil resistivity surveying, non-invasively and non-destructively map subsurface features. These techniques are useful where excavation is undesirable, too costly, or otherwise not possible. They can assist managers in determining which areas to avoid during construction or other land-disturbing activities and which areas may require additional testing or excavation. However, these non-invasive methods require special equipment and training and may be costly. In addition, their land coverage rate is low owing to the nature of the methods and the time needed to implement them. Thus, they are mainly practical at small scales and are not cost-effective in replacing standard archeological survey techniques.

Knowledge Gaps and Management Implications

Southern Nevada's heritage resources are at risk from a variety of factors including urban development and sprawl, and increased recreation use and access to previously remote, undisturbed areas. The Federal agencies that manage these vast acreages and irreplaceable resources remain understaffed and underfunded resulting in substantial management challenges. Nonetheless, they have implemented public education and outreach projects, volunteer site monitoring efforts, and law enforcement programs in attempts to protect the areas at risk. Continued research is needed to assess the effectiveness of these programs and develop additional means of cultural resource protection that can be implemented with limited funding.

When implementing projects, managers must address issues associated with protection and preservation of known sites as well as identifying and protecting any newly discovered sites. There are significant knowledge gaps relating to southern Nevada's

past, as derived from the archeological record. Only 783,756 acres (317,174.8 hectares), or 7 percent of the lands under consideration, have been surveyed for archeological resources (see fig.8.1); thus, a large portion of the area has received no survey coverage. Because of the sparse nature of archeological survey coverage, basic inventories of cultural resources are needed. In particular, inventories that are not associated with planned development projects are desirable to expand the acres of surveyed lands and address gaps in coverage. Complete coverage of the public lands in the study area is not a realistic goal owing to the cost involved, because SNAP offices manage 7 million acres (2,832,799 hectares), a huge area to meet the “complete survey” expectation. That would be over 500 man-years to survey with 30-meter (32.8 yard) transects at 2 miles (3.22 kilometers) per hour. In addition, cultural resource recording standards, as well as the sites themselves, will continue to change over time. A more realistic goal for regional-scale inventory would be to expand and improve the sample of lands that have been examined and of sites that have been located and recorded. Because cultural resources represent finite, non-renewable resources that must be protected for the future, an important goal of inventory is to provide baseline information for measuring changes in the condition of sites through time. For a complete discussion of topics in this executive summary, see *Chapter 9, Preserving Heritage Resources Through Responsible Use of Southern Nevada’s Lands* in “The Southern Nevada Agency Partnership Science and Research Synthesis—Science to support land management in Southern Nevada” (RMRS-GTR-303).

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